I would note from my experience and study, the nearby ISL mine at Crow Butte has faults which are visible from space and cut through the existing and proposed operation. Yet CAMECO, like Powertech is attempting to do, has never reported or acknowledged them.

Secondary porosity, in the form of intersecting faults and joints, is common in all of the rocks

north, east, and south of the Black Hills Dome, especially north of and along the Pine Ridge

Escarpment (see Swinehart & others 1985). These faults and joints are generally oriented NWSE

and SW-NE, and are most likely a result of the ongoing uplift of the Black Hills of

southwestern South Dakota. Although a few people consider the Black Hills uplift to have ended

by the late Cretaceous (~65 Ma), the Black Hills were tectonically active in the late Eocene

(Evans & Terry 1994), and continued to fault, fracture, and fold the rocks of northwestern

Nebraska and southwestern South Dakota into the middle Miocene (Fielding & others 2007).

Based on numerous small earthquakes along the Sandoz Ranch-Whiteclay Fault, the area is still

tectonically active (McMillan & others 2006). These earthquakes are relatively mild, and don't

significantly damage surface infrastructure. However, even small earthquakes represent shifting

and flexing of the earth's crust, and are continuously creating, closing, and redistributing the

secondary porosity of the region's rocks. This means that joints incapable of transmitting water

one day may be able to transmit water at a later date. These faults and fractures transect all major

bedrock units of the region. These faults likely connect the uranium-bearing strata to adjacent

aquifers as well as modern river alluvium.

In their application to the NRC, Powertech reports

horizontal flows within the uranium-bearing strata (the Inyan Kara Group) of up to 35.5

meters/day (Chilson Member, section 3.3.2.2)